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1.

What is claimed is:

A method to manage congestion in a network, the method comprising:
determining a congestion status associated with a node in the network ;
and
advertising the congestion status to at least one other node in the network.

2. The method of claim 1 wherein determining the congestion status comprises:

measuring a node condition at the node, the node condition corresponding to the congestion status.

3. The method of claim 1 wherein advertising the connection status comprises:

setting a transit flag, the transit flag being accessible to the at least one other node.

4. The method of claim 1 wherein the node is one of a transit node and a terminating node.

5. The method of claim 4 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.

6. The method of claim 5 wherein the at least one other node is one other logical node in the hierarchical network, the one other logical node corresponding to one other peer group of nodes.

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7. The method of claim 6 wherein the network is an asynchronous mode transfer (ATM) network.
8. The method of claim 7 wherein the node is one of a private network-to-network interface (PNNI) node.
9. The method of claim 8 wherein the transit flag is one of a PNNI topology state parameter.
10. A method to manage congestion in a network, the method comprising:
receiving a congestion status associated with a node in the network, the congestion status corresponding to a measured node condition at the node; and
routing a call to the node based on the received congestion status.
11. The method of claim 10 wherein receiving the congestion status comprises accessing a transit flag set by the node, the transit flag corresponding to the congestion status.
12. The method of claim 11 wherein the node is one of a transit node and a terminating node.
13. The method of claim 12 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.
14. The method of claim 13 wherein routing the call to the node comprises:
routing the call to the node if the node is a terminating node; and

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routing the call to the node if the node is a transit node and the congestion status indicates that the node is not congested.

15. The method of claim 11 wherein the network is an asynchronous mode transfer (ATM) network.
16. The method of claim 15 wherein the node is one of a private network-to-network interface (PNNI) node.
17. The method of claim 16 wherein the transit flag is one of a PNNI topology state parameter.
18. A computer program product comprising:
a computer usable medium having computer program code embodied therein for managing congestion in a network, the computer program product having:
computer readable program code for determining a congestion status associated with a node in the network ; and
computer readable program code for advertising the congestion status to at least one other node in the network.
19. The computer program product of claim 18 wherein the computer readable program code for determining the congestion status comprises:
computer readable program code for measuring a node condition at the node, the node condition corresponding to the congestion status.

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The computer program product of claim 18 wherein the computer readable program code for advertising the connection status comprises:

computer readable program code for setting a transit flag, the transit flag being accessible to the at least one other node.

21. The computer program product of claim 18 wherein the node is one of a transit node and a terminating node.

22. The computer program product of claim 21 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.

23. The computer program product of claim 22 wherein the at least one other node is one other logical node in the hierarchical network, the one other logical node corresponding to one other peer group of nodes.

24. The computer program product of claim 23 wherein the network is an asynchronous mode transfer (ATM) network.

25. The computer program product of claim 24 wherein the node is one of a private network-to-network interface (PNNI) node.

26. The computer program product of claim 25 wherein the transit flag is one of a PNNI topology state parameter.

27. A computer program product comprising:

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a computer usable medium having computer program code embodied therein for managing congestion in a network, the computer program product having:

computer readable program code for receiving a congestion status associated with a node in the network, the congestion status corresponding to a measured node condition at the node; and
computer readable program code for routing a call to the node based on the received congestion status.

28. The computer program product of claim 27 wherein the computer readable program code for receiving the congestion status comprises computer readable program code for accessing a transit flag set by the node, the transit flag corresponding to the congestion status.

29. The computer program product of claim 28 wherein the node is one of a transit node and a terminating node.

30. The computer program product of claim 29 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.

31. The computer program product of claim 30 wherein the computer readable program code for routing the call to the node comprises:
computer readable program code for routing the call to the node if the node is a terminating node; and

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computer readable program code for routing the call to the node if the node is a transit node and the congestion status indicates that the node is not congested.

32. The computer program product of claim 28 wherein the network is an asynchronous mode transfer (ATM) network.
33. The computer program product of claim 32 wherein the node is one of a private network-to-network interface (PNNI) node.
34. The computer program product of claim 33 wherein the transit flag is one of a PNNI topology state parameter.
35. A system interfacing to a network comprising:
 - a processor coupled to the network; and
 - a memory coupled to the processor, the memory containing program code for managing congestion in the network, the program code when executed causing the processor to:
 - determine a congestion status associated with a node in the network, and
 - advertise the congestion status to at least one other node in the network.
36. The system of claim 35 wherein the program code causing the processor to determine the congestion status causes the processor to:
 - measure a node condition at the node, the node condition corresponding to the congestion status.

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37. The system of claim 35 wherein the program code causing the processor to advertise the connection status causes the processor to:

set a transit flag, the transit flag being accessible to the at least one other node.

38. The system of claim 35 wherein the node is one of a transit node and a terminating node.

39. The system of claim 38 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.

40. The system of claim 39 wherein the at least one other node is one other logical node in the hierarchical network, the one other logical node corresponding to one other peer group of nodes.

41. The system of claim 40 wherein the network is an asynchronous mode transfer (ATM) network.

42. The system of claim 41 wherein the node is one of a private network-to-network interface (PNNI) node.

43. The system of claim 42 wherein the transit flag is one of a PNNI topology state parameter.

44. A system interfacing to a network comprising:
a processor coupled to the network; and

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a memory coupled to the processor, the memory containing program code for managing congestion in the network, the program code when executed causing the processor to:

receive a congestion status associated with a node in the network, the congestion status corresponding to a measured node condition at the node, and

route a call to the node based on the received congestion status.

45. The system of claim 44 wherein the program code causing the processor to receive the congestion status causes the processor to access a transit flag set by the node, the transit flag corresponding to the congestion status.

46. The system of claim 45 wherein the node is one of a transit node and a terminating node.

47. The system of claim 46 wherein the node is a logical node in a hierarchical network, the logical node corresponding to a peer group of nodes.

48. The system of claim 47 wherein the program code causing the processor to route the call to the node causes the processor to:

route the call to the node if the node is a terminating node; and

route the call to the node if the node is a transit node and the congestion status indicates that the node is not congested.

49. The system of claim 45 wherein the network is an asynchronous mode transfer (ATM) network.

